cells or other bacterial products is incapable of doing harm. Is one justified, in an infection calling for large doses of Bacillus coli communis, to administer a vaccine containing proportionately large doses of presumence intentocoli attachte and tachten and the product of doses of pneumococci, streptococci and staphylococci, on the assumption that these organisms might in some remote manner be also implicated? Would some remote manner be also implicated? it not be more to the point to first ascertain the presence of these organisms and the part each plays in the infection? The objection that in acute cases this procedure would occupy too much time can hardly justify the experimenting with an unknown quantity. Resort can be had to emergency measures of established value.

The work of Wright and his associates has leaned

perhaps too sharply toward conservatism, but the accurate and painstaking effort of these men has given rise to definite and tangible results. They have demonstrated that the introduction of the dead bacterial cells stimulates the production of various bactericidal substances, as opsonins, agglutinins and bacteriolysins, and that these substances are capable of identification and verification.

The question of dosage is perhaps the most vexed problem confronting the user of bacterial vaccines. Some advocate a minute dosage, continuously increased and avoiding a reaction. Others suggest a dosage just bordering on a reaction, and still others insist that a violent reaction is essential. Then, in the matter of spacing of dosage. Some await the subsidence of the negative and positive phases before administering a subsequent dose; others give smaller doses at frequent intervals, and still others give large doses at intervals of twelve to forty-eight hours. Theoretically, the proper dose is that which will produce a mild reaction and this dose should not be repeated until both the negative and positive phases have subsided, when the dose can be somewhat increased according to the indications. It would seem, however, that other methods of dosage have yielded results where this method has failed. Awaiting the subsidence of a reaction generally gives the spacing of the dosage of from three to seven days.

It is evident that no hard and fast rules can

It is evident that no hard and last rules can be laid down as to dosage since it is impossible to determine beforehand what degree of active immunity a case is capable of developing, or the resistance of the individual. The tendency is toward larger dosage than that heretofore advocated. It is quite generally conceded that cases of chronic gonorrheal arthritis require a dosage ranging from 50 to

500 million bacteria.

In furunculosis and carbuncle the dose of staphyloccoci may be run up to several billion bacteria. În acne, and streptococcic infections, the tendency is toward more conservative dosage-within a limit of fifty or one hundred million bacteria. The tendency in the case of pneumo, typhoid, and coli vaccines is

to employ larger dosage.

Within a radius of a hundred miles of San Francisco there are hundreds of physicians employing bacterial vaccines in their daily work. Many of them are getting good results and are using these products extensively. Others have had no results and want to know the reason why. Why do not more of these men report their experiences to their local bodies and the medical journals? Is it not worth while even though the results may not be announced before the world in glaring headlines? There is an urgent need for reports on the use of bacterial vaccines and biologic laboratories cannot supply satisfactory data without the physician's co-operation.

To quote again from New and Nonofficial Remedies—"Bacterial vaccines are used to aid the production of an active immunity. Great care and skill are necessary for their proper use and no definite statements as to dosage, etc., can be given; the physician must be guided by the condition of the patient and the manner in which the latter reacts to the treatment."

San Francisco, Oct. 24, 1911

ST OTO-OPHTHALMOLOGI-CAL SOCIETY. PACIFIC COAST

Notice.

To Members of the Pacific Coast Oto-Ophthal-mological Society:

The following letter will explain why the joint session with the Eye, Ear, Nose and Throat Section of the California State Medical Society will not take place this year as advertised, but will be postponed until further notice: (Copy.)

San Francisco, March 1, 1912.
P. M. Jones, M. D.,
Secretary California State Medical Society. My Dear Doctor—From our conversation of to-day I am definitely informed that the Pacific Coast Oto-Ophthalmological Society cannot appear officially at the meeting of the California State Medical Society, because the Pacific Coast Oto-Ophthalmological Society has not made formal request of the Directors of the California State Medical Society. Therefore, we deem it advisable to post-pone the meeting of the Pacific Coast Oto-Oph-thalmological Society until co-operation can be brought about in a perfectly friendly and harmonious way.

Very truly yours, CULLEN F. WELTY, Secretary of Executive Committee.

PROCEEDINGS OF THE SAN FRANCISCO COUNTY MEDICAL SOCIETY.

During the month of February, 1912, the following meetings were held:

Medical Section, February 6th, 1912.

1. Address by Mr. Frank Somers.
2. Address by Mr. C. H. Bentley.
Discussion by Harry M. Sherman, M. D., M. W. Fredrick, M. D., James T. Watkins, M. D., C. G. Kenyon, M. D.

3. The Hemolytic and Bactericidal Powers of "Paraffin" Plasma and Serum. Thomas Addis, M. D. Discussed by Wm. Ophuls, M. D., and L. S. Schmitt, M. D. (This paper will appear in the Journal of Infectious Diseases.)

4. A Plea for the Early Recognition and Proper Treatment of Hemorrhagic Disease in the Proper Treatment of Hemorrhagic Disease in the New Born. E. Charles Fleischner, M. D. Discussed by Langley Porter, M. D., W. B. Lewitt, M. D. H. D'Arcy Power, M. D., A. J. Lartigau, M. D., L. Breitstein, M. D., Thomas Addis, M. D., and E. Charles Fleischner, M. D. (This paper will be published at a later date in the California State Journal of Medicine.)

5 Demonstration of Specimens of Specimens

5. Demonstration of Specimens of Sporotrichosis. Ernest D. Chipman, M. D.

General Meeting, February 13th, 1912.

1. Arthritis Deformans. A. L. Fisher, M. D. Discussed by C. C. Crane, M. D., Julius Rosenstirn, M. D., Langley Porter, M. D., R. B. Scheier, M. D., and A. L. Fisher, M. D.

2. The Sociological Side of Medicine. Philip Mills Jones, M. D. Discussed by Langley Porter, M. D. Raymond Russ M. D. Julius Rosenstire, M. D. Raymond Russ M. D. Raymond Russ M. D. Julius Rosenstire, M. D. Raymond Russ M. Raym

M. D., Raymond Russ, M. D., Julius Rosenstirn, M. D., and Philip Mills Jones, M. D.

Surgical Section, February 20th, 1912. 1. The Choice of an Anesthetic. Palmer, M. D.

2. The Present Status of Nitrous Oxide in

Major Surgery. Mary Botsford, M. D.
3. A Practical and Simple Method of Maintain-

3. A Fractical and Simple Method of Maintaining Respiration During Operations Involving Opening of the Chest Cavity. Sterling Bunnell, M. D. (This paper is to be published in J. A. M. A.) General discussion by Edith Hammond Williams, M. D., Mary Murphy, M. D., Dudley Tait, M. D., W. I. Terry, M. D., Harry M. Sherman, M. D., Caroline B. Palmer, M. D., Mary Botsford, M. D., Sterling Bunnell, M. D.

Eye, Ear, Nose and Throat Section, February 27th, 1912.

1. Preliminary Report of a Case of Ocular Tuberculosis Involving the Uveal Tracts and Vitreous of Both Eyes. E. D. Shortlidge, M. D. Discussed by Anna Flynn, M. D., W. S. Franklin, M. D., P. de Obarrio, M. D., Wm. F. Blake, M. D. 2. Presentation of a Case of Myringitis of Unknown Origin. Henry Horn, M. D. Discussed by H. B. Graham, M. D., W. S. Franklin, M. D.,

Henry Horn, M. D.

3. Demonstration of a case of Tonsillectomy Complicated by Post-diphtheritic Paresis. J. J. Kingwell, M. D. Discussed by Henry Horn, M. D., Cullen F. Welty, M. D., W. S. Franklin, M. D., J. J. Kingwell, M. D.

4. Report of an Operation on Ethnoid Sinuses. Cullen F. Welty, M. D. Discussed by W. S. Franklin, M. D., Julius Rosenstirn, M. D., Rachel Ash, M. D., H. E. Castle, M. D., M. W. Fredrick, M. D., P. de Obarrio, M. D., Cullen F. Welty, M. D.

5. Lantern Slide Demonstration of Tonsillectomy.

5. Lantern Slide Demonstration of the Accessory Cavities of the Nose. Cullen F. Welty, M. D.

SOCIETY REPORTS

CALIFORNIA ACADEMY OF MEDICINE.

The regular meeting of the California Academy of Medicine was held Monday evening, Feb. 26th,

of Medicine was held Monday evening, Feb. 26th, 1912, at which the following program was given:

1. An Inquiry Into The History of Malaria in California, E. W. Twitchell, M. D. Discussed by Herbert Gunn, M. D., H. R. Oliver, M. D., Harry M. Sherman, M. D. and E. W. Tritchell, M. D.

2. Notes on Two Cases of Systemic Oidiomycosis. G. Y. Rusk, M. D. Discussed by Howard Morrow, M. D., H. R. Oliver, M. D. and G. Y. Rusk, M. D. (This paper will appear in The California Pathological Series).

W. F. Cummins, M. D. and Jacques Loeb, M. D. were elected to membership.

were elected to membership.

Refreshments were served at the close of the

COOPER COLLEGE SCIENCE CLUB.

The Cooper College Science Club held its regular monthly meeting on March 4th, 1912. The follow-

ing scientific program was given:

1. A Few Cases of Tuberculosis. W. R. P. Clark, M. D. Discussed by W. W. Boardman, M. D., A. A. O'Neill, M. D., C. J. Teass, M. D., T. Addis, M. D., P. H. Luttrell, M. D., W. R. P. Clark Clark, M. D.

2. Observations on the Diagnosis of some of the Diseases of the Upper Urinary Tract. R. L. Rigdon, M. D. Discussed by Adelaide Brown, M. D., C. J. Teass, M. D., R. L. Rigdon, M. D. 3. Trichiniasis. H. R. Oliver, M. D. Discussed by H. Gunn, M. D., H. R. Oliver, M. D. Refreshments were served at the close of the

program.

MERCED COUNTY.

The Merced County Medical Society met on February 29th at Merced. A paper on medical ethics was read and very generally discussed. Two new members were elected: Dr. J. L. Mudd, of Merced and Dr. E. L. Bunk, of Raymond, Madera County.

H. KYLBERG, Secretary.

POMONA BRANCH, LOS ANGELES COUNTY.

In February, Dr. Idris B. Gregory entertained the Pomona Branch of the Los Angeles County Society, together with the members of the San Bernardino County Society in the vicinity of Ontario, at her residence in that city. Papers were read by Dr. Smith and Dr. Kenyon of Pomona.

SAN BERNARDINO COUNTY.

The County Medical society held one of the most interesting and instructive meetings of the season last night at the County hospital in San Bernardino on invitation of the superintendent, Dr. P. M. Savage. After a short business session Dr. Savage was introduced and said that it gave him pleasure to entertain the members of the medical profession of the county and stated that it was his earnest desire to make the County hospital as highly efficient as possible in the treatment of the sick and at the same time to use the abundant clinical material there for the teaching and benefit of the medical profession as far as this could be done consistent with the best welfare of the patient.

The assistant superintendent, Miss Madge Ayres, then gave a short account of her experiences and methods of administration of anaesthetics as learned in something over 3000 cases while she was associated with the Mayo brothers in Rochester, Minn. Her paper was very instructive, was well received, and elicited many questions as to details. Dr. Savage then presented a remarkable case of brain abscess following a depressed fracture of the skull and outlined the history of the case and method of operation and demonstrate case and method of operation and demonstrated the patient in his present condition of recovery. The subject was discussed by Dr. B. F. Church, of Redlands, and Dr. McHugh, of Rialto. Another case of enormous abscess of the liver, followed by successful operation and complete recovery was successful operation and complete recovery was presented. A patient who had long suffered from cancer of the stomach was shown together with the cancer which had involved a portion of the stomach the size of a small orange and had been successfully removed by operation. This patient had been entirely relieved of his symptoms and had gained in weight and it was hoped that the operation had been performed early enough so that the whole trouble had been removed. This case was ably discussed by Dr. H. W. Mills, of San Bernardino, and many others. The fourth and last case was an old fracture of the arm with a large callous which had grown out around one of large callous which had grown out around one of the large nerves of the arm producing paralysis by pressure. This patient had been previously shown before the society at Redlands while paralysis was complete. Since that time an operation had been performed to free the nerve from the callous and the function of the arm had been almost completely restored.

Following the general discussion of these cases the doctors were invited to an adjoining room where a most dainty and appetizing luncheon was served by the young ladies connected with the hospital as nurses. There were twenty-seven doctors present. Those going from Redlands were: Drs. Davis, Tyler, Blythe, Church, Stillians, Hil-liard, Taltavall, Shreck, Wagenseller and Verrinder.

TULARE COUNTY.

The regular meeting of the Tulare County Med-Ine regular meeting of the Iulare County Medical Society for February was held at Porterville on the 13th. Dr. J. B. Rosson, of Tulare, read a paper on Lodges and Examinations; Dr. S. A. Barber read a paper on Overlooked Injuries of the Shoulder Joint. At the close of the meeting a banquet was held at the Pioneer Hotel.

VACCINATION LAW.

When the anti-vaccinationists got the present vaccination law passed, they professed willingness to accept the provision that in case of an outbreak of smallpox, unvaccinated children should be excluded from the schools until the smallpox disappeared. But now that the actual situation confronts them they protest and insist that the rule ought to apply only in the case of a wide-spread epidemic. In other words, what they want is a law that will make vaccination optional with